

## Claims

1. A method of assembling a semiconductor device package comprises:

- (i) attaching a semiconductor device to a die-pad area of a leadframe;
- (ii) forming electrical connections between electrical contact areas on the semiconductor device and electrical contact areas on the leadframe to form a device/leadframe assembly;
- (iii) depositing an adhesion enhancing coating on exposed surfaces of the device/leadframe assembly; and
- (iv) encapsulating the coated device/leadframe assembly in an electrically insulating material.

2. A method according to claim 1, wherein the adhesion enhancing coating is deposited electrolytically by an electroplating process.

3. A method according to claim 1 or claim 2, wherein the semiconductor device package is a surface mount semiconductor device package.

4. A method according to any of the preceding claims, further comprising, after encapsulating the coated device/leadframe assembly, removing the coating from non-encapsulated portions of the leadframe.

5. A semiconductor device package comprises a leadframe; a semiconductor device attached to a first portion of the leadframe; electrical connections extending from electrical contact areas on the semiconductor device to electrical contact areas on a second portion of the leadframe; an adhesion enhancing coating on surfaces of the leadframe, the electrical connections and the semiconductor device; and an electrically insulating material encapsulating the semiconductor device, the electrical connections and the first and second portions of the leadframe.

6. A semiconductor device package according to claim 5, wherein the adhesion enhancing coating is a metallic coating.

7. A semiconductor device package according to claim 6, wherein the metallic coating is an inorganic Zn-Cr coating.

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A> 8. A semiconductor device package according to any of claims 5 to 7, wherein the semiconductor device is attached to the first portion of the leadframe by an adhesive.

9. A semiconductor device package according to any of claims 5 to 7, wherein the semiconductor device is attached to the first portion of the leadframe by solder.

10. A semiconductor device package according to any of claims 5 to 9, wherein the semiconductor device is a

*Sib  
A2  
conv.* surface mount semiconductor device.

11. A semiconductor device package according to any of claims 5 to 10, wherein the semiconductor device is a power semiconductor device.

12. A semiconductor device package according to any of claims 5 to 11, wherein the first portion of the leadframe forms a heat sink for the semiconductor device and a surface of the first portion is not covered by the electrically insulating material.